

Warm Up # 4-5

1. Write the point-slope equation for the line through: (7, -5) and (-1, -3)

2. Write in vertex form and state the vertex:

$$y = x^2 + 6x - 13$$

HW Questions: p. 322

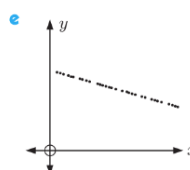
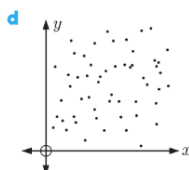
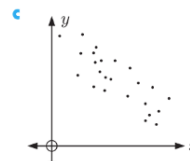
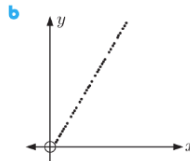
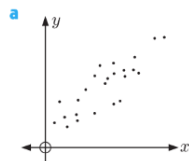
EXERCISE 11B.1

- 1 In a recent survey, the Department of International Commerce compared the *size of a company* with its *export earnings*. A scatter diagram of their data is shown alongside. The corresponding value of r is 0.556.

Describe the association between the variables.



- 2 Match each scatter diagram with the correct value of r .



A $r = 1$

B $r = 0.6$

C $r = 0$

D $r = -0.7$

E $r = -1$

5 Consider the **Opening Problem** on page 316.

- a Calculate r for this data.
- b Hence describe the association between the variables.

6 A basketballer takes 20 shots from each of ten different positions marked on the court. The table below shows how far each position is from the goal, and how many shots were successful:

<i>Position</i>	A	B	C	D	E	F	G	H	I	J
<i>Distance from goal (x m)</i>	2	5	3.5	6.2	4.5	1.5	7	4.1	3	5.6
<i>Successful shots (y)</i>	17	6	10	5	8	18	6	8	13	9

- a Draw a scatter diagram of the data.
- b Do you think r will be positive or negative?
- c Calculate the value of r .
- d Describe the linear correlation between these variables.
- e Copy and complete:
As the distance from goal increases, the number of successful shots generally
- f Is there a causal relationship between these variables?

Staple and turn in

Week 4 Classwork:

Warm up on top

Correlation Classwork
(Predicting Success WS)

p. 325 # 1 & p. 330 # 1

HW: 11C, p. 330 # 3
(by hand except for mean calculation)

and 11D, p. 332 # 1, 3
(scatter plot on graph paper and rest
with calculator)

Visit this website. Link on my website.

Correlation viewing



<http://wilderdom.com/301/int/cor-guess.html>